

509

VOLUME 80

SEPARATE No. 509

# PROCEEDINGS

AMERICAN SOCIETY  
OF  
CIVIL ENGINEERS

SEPTEMBER, 1954



## HISTORY OF THE CITY PLANNING DIVISION OF THE ASCE

by Harry W. Alexander, M. ASCE

### CITY PLANNING DIVISION

*{Discussion open until January 1, 1955}*

Copyright 1954 by the AMERICAN SOCIETY OF CIVIL ENGINEERS  
Printed in the United States of America

Headquarters of the Society  
33 W. 39th St.  
New York 18, N. Y.

PRICE \$0.50 PER COPY

## THIS PAPER

--represents an effort by the Society to deliver technical data direct from the author to the reader with the greatest possible speed. To this end, it has had none of the usual editing required in more formal publication procedures.

Readers are invited to submit discussion applying to current papers. For this paper the final date on which a discussion should reach the Manager of Technical Publications appears on the front cover.

Those who are planning papers or discussions for "Proceedings" will expedite Division and Committee action measurably by first studying "Publication Procedure for Technical Papers" (Proceedings - Separate No. 280). For free copies of this Separate--describing style, content, and format--address the Manager, Technical Publications, ASCE.

Reprints from this publication may be made on condition that the full title of paper, name of author, page reference (or paper number), and date of publication by the Society are given.

The Society is not responsible for any statement made or opinion expressed in its publications.

This paper was published at 1745 S. State Street, Ann Arbor, Mich., by the American Society of Civil Engineers. Editorial and General Offices are at 33 West Thirty-ninth Street, New York 18, N. Y.

## HISTORY OF THE CITY PLANNING DIVISION OF THE ASCE

Harry W. Alexander, M. ASCE<sup>1</sup>

The American Society of Civil Engineers is over a century old and is justifiably proud of its history of accomplishment, which has led up to its present eminent position among the technical and professional organizations of the United States.

As the Society grew over the years, recognizing that many of its members are interested in one or another of the specialized fields of civil engineering it authorized the organization of technical divisions for the consideration of any engineering, scientific or professional subject. There are now fourteen of these specialized groups, one of which is the City Planning Division.

Meetings of the technical divisions customarily are held in connection with conventions of the Society. They afford an opportunity for members to present papers on various aspects of the specialized field in which they are primarily interested and to exchange ideas and viewpoints among themselves.

The City Planning Division was the first technical division to be authorized by the Society. This event took place on July 9, 1923.

The purpose of the Division was, and still is, "to promote a wider understanding of the science and art of planning towns, cities and communities through (a) preparation of papers dealing with numerous phases of planning (b) discussion of planning principles and activities at society meetings and (c) publication of manuals on planning subjects and techniques of special significance to engineers. Since planning comprehends the full development of a community, the engineer, as a planner, is concerned with the coordination of the work of the engineer, the architect, the landscape architect, the lawyer, the economist and the sociologist, insofar as they affect arrangement, design and improvement of a community."

Since its first meeting in New York on January 17, 1924, the Division has devoted itself to carrying out the precepts outlined above.

### The Sponsorship of Technical Sessions

It has been the policy of the Division to sponsor technical sessions at the annual convention of the Society and at all other general meetings except when exceptional circumstances prevent. Beginning in 1924, when the first meeting was held in New York City, the Division has sponsored more than seventy technical sessions. It has also been the policy of the Division to meet jointly with other divisions and a number of such sessions have been held in the past.

1. Partner, Harland Bartholomew and Associates, St. Louis, Mo.

The wide variety of papers presented at the various sessions of the Division is an indication of the breadth and scope of the City Planning profession. Perusal of their titles over a thirty-year period reveals the emergence of new and challenging problems in urban growth that have demanded the attention of civil engineers and city planners generally. Some of the problems which were discussed in 1924 exist today in aggravated form. For example, all of the discussions at both the New York and Pasadena sessions were devoted to traffic problems and highway planning.

During these meetings Arthur S. Tuttle presented a paper on "Increasing the Capacity of Existing Streets," while George A. Damon discussed "The Influence of the Automobile on Regional Transportation Planning" and E. E. East discussed "Regional Aspects of Planning Streets and Highways for Modern Transportation." These same topics still occupy the attention of city planners, traffic engineers and municipal administrators, which suggests that final solutions to the traffic problem are yet to be found.

In 1924, the subject of zoning was in its infancy. Only a few cities had adopted such regulatory measures, and it was only eight years previously that the first comprehensive zoning ordinance was adopted in New York City.

The entire program of the 1924 meeting in Detroit was concerned with this important subject. Two symposiums were conducted. The first, entitled "Factors in the Zoning of Cities" included a wide range of topics and was participated in by several well-known planners. At least two of these, Mr. Harland Bartholomew and Mr. Lawrence V. Sheridan are still active in the field.

A second symposium was entitled "The Influence of Zoning on the Design of Public Utilities." That part of the subject devoted to water supply was presented by Malcolm Pirnie, a distinguished member of the Society, who later assumed the office of President.

Another subject which has grown in importance in recent years was discussed in one of the early meetings. At the San Diego meeting in 1928, D. M. Baker presented a paper in "Factors Governing the Location of Airports." By 1945 the subject of Air Transportation had become so important that a new Technical Division was created in the Society to deal with the many ramifications of the problem.

For many years our larger cities have been concerned with the problem of poor housing, but they did not attract national attention generally until the early thirties. The Division was quick to recognize the importance of slum clearance in the replanning and rebuilding of American cities; and during the 1933 meeting in Chicago, Mr. J. H. Millar presented a paper entitled "Preparedness for Slum Clearance." In subsequent meetings, the subject has been thoroughly explored, and today slum clearance is at last actively under way in many cities.

In 1941 the parking problem was becoming acute, and since that time much discussion has taken place in Division meetings about ways and means of meeting the situation. At the San Diego meeting in 1941, Mr. John G. Man presented a paper entitled "Business District Rehabilitation and the Parking Problem."

During the war years, the Division's activities were severely curtailed, although a few meetings were held. It was only natural that the subject matter of the papers presented at these meetings should be devoted to the impact of the war on urban communities, as shown by the titles of several of the papers, such as "Effect of Defense Plant Locations on Official City Plans"; "Effect of War Induced Migration Upon Urban Communities"; "Integrating Long-range Planning with the Post-War Works Program."

Since the war, the discussions at the numerous meetings of the Division have covered a wide range of topics. Typical of these were Mr. Thomas H. MacDonald's paper on the "Proposed Interregional Highway System as it Affects Cities"; "The Economic Aspects of Suburbanization versus Centralization of Cities" by Winters Haydock and "The Practical Aspects of Transportation Planning in Large Metropolitan Areas" by Leslie Williams.

#### Technical Committees

The Division's second main activity is devoted to the work of technical committees. The importance of committee work was recognized shortly after the Division was organized. Some of these were committees to which were assigned the task of developing means for improving and expanding the Division's activities. Typical of such Committees were those on "Classification of Membership"; "Library"; "Manuals and Review of Division papers." These committees completed their work and were discontinued.

Other committees were assigned the important duty of producing technical manuals for use by the profession in several fields. Among these were:

Committee on Land Subdivision Manual. For several years this committee gave a great deal of attention to this important subject under the chairmanship of Mr. Rolland S. Wallis and Mr. Harland Bartholomew. This work culminated in the publication in 1939 of the manual which has since been a standard reference work for planning commissions and subdivision designers.

A Streets Thoroughfare manual was prepared under the chairmanship of W. W. Crosley, which was published in the 1934 Proceedings and Transactions. This manual suggested methods of identifying street thoroughfares according to their use and capacity. It is interesting to note that Mr. W. W. Horner, President of the Society in 1946, was a member of this committee.

A manual on Location of Underground Utilities was prepared under the chairmanship of Mr. Arthur D. Consouer, which was printed by the Society in 1937. This manual formulated general principles on the subject, which could be expanded and detailed locally.

Other committees have performed important technical work since organization of the Division. Some of these committees were as follows:

Street Names and Numbers  
The National Capital  
Equitable Zoning of Assessments for  
City Planning Projects

**Blighted Urban Areas**  
**City Planning Training for Civil Engineers**  
**Floods (Joint Committee with Hydraulics Division)**  
**Urban Land Policies**  
**Seismology (Joint Committee with Soil Mechanics  
and Foundation Division)**  
**Industrial Zoning (Joint Committee with several  
other technical organizations)**

The success of any technical organization depends upon the leadership developed from its personnel and the hard work of its members. No history would be complete without briefly mentioning some of the members who have had an important part in guiding the destinies of the Division.

Mr. Nelson P. Lewis, the first chairman of the Division, was, for many years, a leader in the profession of municipal engineering. He was the author of one of the first text books in City Planning, "The Planning of the Modern City," and occupied the important position of Chief Engineer of the Board of Estimate and Apportionment of New York. It is of interest to note that his son, Harold M. Lewis, has also attained an eminent position in the profession and served as chairman of the Division in 1938. He also has written a notable book on City Planning, which is a comprehensive revision of his father's earlier volume.

Mr. W. W. De Berard, chairman in 1930, has had a distinguished career in municipal engineering and presently serves as City Engineer for the City of Chicago. He is an honorary member of the Society and served as Director in 1938 to 1940.

Mr. Edward N. Noyes, chairman in 1931-1932, is a partner in the consulting firm of Myers and Noyes, Corpus Christi, Texas. He was a vice-president of the Society in 1938-1939 and served on the Board of Direction in 1933-1935.

George H. Herrold, chairman, 1933-1934, has for many years acted as Director of City Planning in St. Paul, Minnesota, and recently has been named Planning and Zoning Consultant for the City.

Russell V. Black, chairman, 1935, is a planning consultant in New Hope, Pennsylvania.

Harland Bartholomew, chairman from 1939 to 1941, is head of the firm of Harland Bartholomew and Associates, and is active on the National Capital Park and Planning Commission.

John Nolen, Jr., chairman in 1942 and 1943, is a son of the distinguished city planner, John Nolen, Sr. He is Director of the National Capital Planning Commission in Washington, D. C.

William J. Shea, chairman in 1944 and 1945, formerly was head of the Planning Department of the City of New York. He is now retired.

Chairmen since 1946 include Frank H. Malley, Director of City Planning for Providence, R. I.; Lawrence V. Sheridan, Planning Consultant, Indianapolis, Indiana; and Hugo Winters, City Bureau of Engineering, Los Angeles, and the writer.

## PROCEEDINGS-SEPARATES

The technical papers published in the past year are presented below. Technical-division sponsorship is indicated by an abbreviation at the end of each Separate Number, the symbols referring to: Air Transport (AT), City Planning (CP), Construction (CO), Engineering Mechanics (EM), Highway (HW), Hydraulics (HY), Irrigation and Drainage (IR), Power (PO), Sanitary Engineering (SA), Soil Mechanics and Foundations (SM), Structural (ST), Surveying and Mapping (SU), and Waterways (WW) divisions. For titles and order coupons, refer to the appropriate issue of "Civil Engineering" or write for a cumulative price list.

### VOLUME 79 (1953)

SEPTEMBER: 260(AT), 261(EM), 262(SM), 263(ST), 264(WW), 265(ST), 266(ST), 267(SA), 268(CO), 269(CO), 270(CO), 271(SU), 272(SA), 273(PO), 274(HY), 275(WW), 276(HW), 277(SU), 278(SU), 279(SA), 280(IR), 281(EM), 282(SU), 283(SA), 284(SU), 285(CP), 286(EM), 287(EM), 288(SA), 289(CO).

OCTOBER: b 290(all Divs), 291(ST)<sup>a</sup>, 292(EM)<sup>a</sup>, 293(ST)<sup>a</sup>, 294(PO)<sup>a</sup>, 295(HY)<sup>a</sup>, 296(EM)<sup>a</sup>, 297(HY)<sup>a</sup>, 298(ST)<sup>a</sup>, 299(EM)<sup>a</sup>, 300(EM)<sup>a</sup>, 301(SA)<sup>a</sup>, 302(SA)<sup>a</sup>, 303(SA)<sup>a</sup>, 304(CO)<sup>a</sup>, 305(SU)<sup>a</sup>, 306(ST)<sup>a</sup>, 307(SA)<sup>a</sup>, 308(PO)<sup>a</sup>, 309(SA)<sup>a</sup>, 310(SA)<sup>a</sup>, 311(SM)<sup>a</sup>, 312(SA)<sup>a</sup>, 313(ST)<sup>a</sup>, 314(SA)<sup>a</sup>, 315(SM)<sup>a</sup>, 316(AT), 317(AT), 318(WW), 319(IR), 320(HW).

NOVEMBER: 321(ST), 322(ST), 323(SM), 324(SM), 325(SM), 326(SM), 327(SM), 328(SM), 329(HW), 330(EM)<sup>a</sup>, 331(EM)<sup>a</sup>, 332(EM)<sup>a</sup>, 333(EM)<sup>c</sup>, 334(EM), 335(SA), 336(SA), 337(SA), 338(SA), 339(SA), 340(SA), 341(SA), 342(CO), 343(ST), 344(ST), 345(ST), 346(IR), 347(IR), 348(CO), 349(ST), 350(HW), 351(HW), 352(SA), 353(SU), 354(HY), 355(PO), 356(CO), 357(HW), 358(HY).

DECEMBER: 359(AT), 360(SM), 361(HY), 362(HY), 363(SM), 364(HY), 365(HY), 366(HY), 367(SU)<sup>c</sup>, 368(WW)<sup>c</sup>, 369(IR), 370(AT)<sup>c</sup>, 371(SM)<sup>c</sup>, 372(CO), 373(ST)<sup>c</sup>, 374(EM)<sup>c</sup>, 375(EM), 376(EM), 377(SA)<sup>c</sup>, 378(PO)<sup>c</sup>.

### VOLUME 80 (1954)

JANUARY: 379(SM)<sup>c</sup>, 380(HY), 381(HY), 382(HY), 383(HY), 384(HY)<sup>c</sup>, 385(SM), 386(SM), 387(EM), 388(SA), 389(SU)<sup>c</sup>, 390(HY), 391(IR)<sup>c</sup>, 392(SA), 393(SU), 394(AT), 395(SA)<sup>c</sup>, 396(EM)<sup>c</sup>, 397(ST)<sup>c</sup>.

FEBRUARY: 398(IR)<sup>d</sup>, 399(SA)<sup>d</sup>, 400(CO)<sup>d</sup>, 401(SM)<sup>c</sup>, 402(AT)<sup>d</sup>, 403(AT)<sup>d</sup>, 404(IR)<sup>d</sup>, 405(PO)<sup>d</sup>, 406(AT)<sup>d</sup>, 407(SU)<sup>d</sup>, 408(SU)<sup>d</sup>, 409(WW)<sup>d</sup>, 410(AT)<sup>d</sup>, 411(SA)<sup>d</sup>, 412(PO)<sup>d</sup>, 413(HY)<sup>d</sup>.

MARCH: 414(WW)<sup>d</sup>, 415(SU)<sup>d</sup>, 416(SM)<sup>d</sup>, 417(SM)<sup>d</sup>, 418(AT)<sup>d</sup>, 419(SA)<sup>d</sup>, 420(SA)<sup>d</sup>, 421(AT)<sup>d</sup>, 422(SA)<sup>d</sup>, 423(CP)<sup>d</sup>, 424(AT)<sup>d</sup>, 425(SM)<sup>d</sup>, 426(IR)<sup>d</sup>, 427(WW)<sup>d</sup>.

APRIL: 428(HY)<sup>c</sup>, 429(EM)<sup>c</sup>, 430(ST), 431(HY), 432(HY), 433(HY), 434(ST).

MAY: 435(SM), 436(CP)<sup>c</sup>, 437(HY)<sup>c</sup>, 438(HY), 439(HY), 440(ST), 441(ST), 442(SA), 443(SA).

JUNE: 444(SM)<sup>e</sup>, 445(SM)<sup>e</sup>, 446(ST)<sup>e</sup>, 447(ST)<sup>e</sup>, 448(ST)<sup>e</sup>, 449(ST)<sup>e</sup>, 450(ST)<sup>e</sup>, 451(ST)<sup>e</sup>, 452(AT)<sup>e</sup>, 453(SA)<sup>e</sup>, 454(SA)<sup>e</sup>, 455(SA)<sup>e</sup>, 456(SM)<sup>e</sup>.

JULY: 457(AT), 458(AT), 459(AT)<sup>c</sup>, 460(IR), 461(IR), 462(IR), 463(IR)<sup>c</sup>, 464(PO), 465(PO)<sup>c</sup>.

AUGUST: 466(HY), 467(HY), 468(ST), 469(ST), 470(ST), 471(SA), 472(SA), 473(SA), 474(SA), 475(SM), 476(SM), 477(SM), 478(SM)<sup>c</sup>, 479(HY)<sup>c</sup>, 480(ST)<sup>c</sup>, 481(SA)<sup>c</sup>, 482(HY), 483(HY).

SEPTEMBER: 484(ST), 485(ST), 486(ST), 487(CP)<sup>c</sup>, 488(ST)<sup>c</sup>, 489(HY), 490(HY), 491(HY)<sup>c</sup>, 492(SA), 493(SA), 494(SA), 495(SA), 496(SA), 497(SA), 498(SA), 499(HW), 500(HW), 501(HW)<sup>c</sup>, 502(WW), 503(WW), 504(WW)<sup>c</sup>, 505(CO), 506(CO)<sup>c</sup>, 507(CP), 508(CP), 509(CP), 510(CP), 511(CP).

a. Presented at the New York (N.Y.) Convention of the Society in October, 1953.

b. Beginning with "Proceedings-Separate No. 290," published in October, 1953, an automatic distribution of papers was inaugurated, as outlined in "Civil Engineering," June, 1953, page 86.

c. Discussion of several papers, grouped by Divisions.

d. Presented at the Atlanta (Ga.) Convention of the Society in February, 1954.

e. Presented at the Atlantic City (N.J.) Convention in June, 1954.

# AMERICAN SOCIETY OF CIVIL ENGINEERS

## OFFICERS FOR 1954

### PRESIDENT

DANIEL VOIERS TERRELL

### VICE-PRESIDENTS

*Term expires October, 1954:*

EDMUND FRIEDMAN  
G. BROOKS EARNEST

*Term expires October, 1955:*

ENOCH R. NEEDLES  
MASON G. LOCKWOOD

### DIRECTORS

*Term expires October, 1954:*

WALTER D. BINGER  
FRANK A. MARSTON  
GEORGE W. MCALPIN  
JAMES A. HIGGS  
I. C. STEELE  
WARREN W. PARKS

*Term expires October, 1955:*

CHARLES B. MOLINEAUX  
MERCEL J. SHELTON  
A. A. K. BOOTH  
CARL G. PAULSEN  
LLOYD D. KNAPP  
GLENN W. HOLCOMB  
FRANCIS M. DAWSON

*Term expires October, 1956:*

WILLIAM S. LaLONDE, JR.  
OLIVER W. HARTWELL  
THOMAS C. SHEDD  
SAMUEL B. MORRIS  
ERNEST W. CARLTON  
RAYMOND F. DAWSON

### PAST-PRESIDENTS

*Members of the Board*

CARLTON S. PROCTOR

WALTER L. HUBER

TREASURER

EXECUTIVE SECRETARY

CHARLES E. TROUT

WILLIAM N. CAREY

ASSISTANT TREASURER

ASSISTANT SECRETARY

GEORGE W. BURPEE

E. L. CHANDLER

---

## PROCEEDINGS OF THE SOCIETY

HAROLD T. LARSEN  
*Manager of Technical Publications*

DEFOREST A. MATTESON, JR.  
*Editor of Technical Publications*

PAUL A. PARISI  
*Assoc. Editor of Technical Publications*

---

### COMMITTEE ON PUBLICATIONS

FRANK A. MARSTON, *Chairman*

I. C. STEELE

GLENN W. HOLCOMB

ERNEST W. CARLTON

OLIVER W. HARTWELL

SAMUEL B. MORRIS